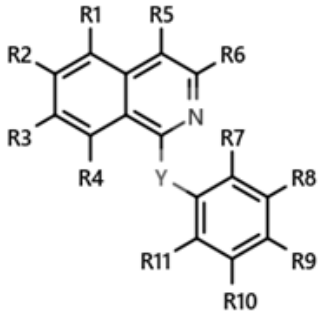
CLAIMS

1. A compound of Formula (I):



(I)

in which Y is selected from NH and CH_2; R1 is selected from H, halogen and C_1-C_6 alkyl, optionally substituted with a group selected from halogen, OR^{12} and $NR^{13}R^{14}$; R2 is selected from H, halogen, C_1-C_6 alkyl, optionally substituted with a group selected from halogen, OR^{12} and NHR^{13}, or C_2-C_6 alkenyl, or a group OR^{12}, $NR^{13}R^{14}$ or a cyano group or an optionally substituted heterocycle; R3 is selected from H, halogen, C_1-C_6 alky, optionally substituted with a group selected from halogen, OR^{12} and $NR^{13}R^{14}$ or C_2-C_6 alkenyl, or a group OR^{12}, or NHR^{13}, or an optionally substituted heterocycle or a cyano group; R4 is selected from H, halogen C_1-C_6 alkyl, optionally substituted with a group selected from halogen, OR^{12} and NHR^{13}, or an optionally substituted heterocycle and a cyano group; R5 is selected from H, halogen, C_1-C_6 alkyl, optionally substituted with a group selected from halogen, OR^{12} and NHR^{13}, or a group OR^{12}, or $NR^{13}R^{14}$; R6 is selected from H, halogen, C_1-C_6 alkyl, optionally substituted with a group selected from halogen, OR^{12} and NHR^{13}, or a group OR^{12}, or NHR^{13}; R7 and R8 are independently selected from H and halogen; R9 is selected from SO-C_1-C_6 alkyl, SO_2-C_1-C_6 alkyl, SO_2-C_3-C_6 cycloalkyl, or an optionally substituted heterocycle selected from optionally substituted imidazole, optionally substituted isoxazole, optionally substituted oxazole, optionally substituted pyridine, optionally substituted pyrimidine, optionally substituted pyrrolinone, and optionally substituted oxetane; R10 and R11 are independently selected from H and halogen; R12, R13, and R14 are independently selected from H, C(O)- C_1-C_6 alkyl and optionally substituted C_1-C_6 alkyl or C_3-C_6 cycloalkyl; any pharmaceutically acceptable salts, hydrates, solvates, or polymorphs, tautomers, optically active forms, enantiomeric mixtures thereof, and mixtures thereof,

for the prevention, the repression or treatment of for the prevention, the repression or treatment of neurological disease or any medical condition characterized by an hypometabolic status and/or a dysfunction of the central or peripheral nervous system, in particular amyotrophic lateral sclerosis (ALS), dementia, in particular all stages of Alzheimer's disease, frontotemporal dementia (FTD), dementia with Lewy bodies (LBD), mild cognitive impairments (MCI), vascular dementia, Progressive Supranuclear Palsy (PSP), Multiple System Atrophy (MSA), movement disorders such as all stages of Parkinson's disease including L-Dopa Induced dyskinesia, Huntington disease, Spino-cerebellar ataxias, Essential Tremor, Dystonias and associated neurodegenerative conditions, such as multiple sclerosis, retinopathies, stroke, traumatic brain injury, intracerebral- and subarachnoid-haemorrhage, any neuropsychiatric disorder such as any endophenotype of depression, schizophrenia, anxiety, attention-deficit syndrome, autism, a neurometabolic disorder such as glucose transporter 1 deficiency syndrome (GLUT1-DS), Lafora disease and other glycogen storage disorders, Down Syndrome, all types of epilepsy, migraine and cognitive impairments in Type 2 diabetes (T2D), brain hypometabolism status caused by viral infection such as HIV or COVID-19, by prion infection such as in Creutzfeldt-Jakob disease, primary and secondary encephalitis or by abnormal protein processing and accumulation such as all types of amyloidopathies, synucleinopathies, tauopathies, TD43opathies and other proteinopathies, brain hypometabolism status following anaesthesia or post-operative care or for the treatment or stabilizing a neurological disorder with brain hypometabolism or associated symptoms that include cognitive impairment, motor function and movement disorders, psychiatric symptoms or epileptic seizures and for enhancing cognitive and memory functions.

2. A compound of Formula (I) as defined in Claim 1, any pharmaceutically acceptable salts, hydrates, solvates, or polymorphs, tautomers, optically active forms, enantiomeric mixtures thereof, and mixtures thereof, with the provisio that the compound is not a compound selected from the following list:

N-[4-[5-Ethyl-3-(1-methylethyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 1101888-63-4;

N-[4-[5-Chloro-3-(trifluoromethyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 251657-99-5;

N-[4-[5-Ethyl-3-(3-pyridinyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 251658-04-5;

N-[4-[3,5-Bis(trifluoromethyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 251657-94-0*;*

N-[4-[3-(Tetrahydro-2-furanyl)-5-(trifluoromethyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 1101888-82-7;

N-[4-[3-(3-Pyridinyl)-5-(trifluoromethyl)-1*H*-pyrazol-1-yl]phenyl]-1-isoquinolinamine, RN: 251658-03-4;

3-Methyl-*N*-[4-(4-pyridinyl)phenyl]-1-isoquinolinamine, RN:1368370-93-7;

1-[[4-(4-Pyridinyl)phenyl]amino]-8-isoquinolinecarbonitrile, RN:1368269-53-7;

8-Methyl-N^1-[4-(4-pyridinyl)phenyl]-1,5-isoquinolinediamine, RN:1369288-67-4;

5-Nitro-*N*-[4-(4-pyridinyl)phenyl]-1-isoquinolinamine, RN:1368370-43-7;

N-[4-(4-Pyridinyl)phenyl]-5-(trifluoromethyl)-1-isoquinolinamine, RN: 1367803-95-9; and

4-Bromo-N^1-[4-(4-pyridinyl)phenyl]-1,7-isoquinolinediamine, 1369271-85-1.

3. A compound according to Claim 2, in which **Y** is CH_2.

4. A compound according to Claim 2, in which **Y** is NH.

5. A compound according to Claim 2, 3 or 4, in which **R1, R5, R4** and **R6** are H.

6. A compound according to any of Claims 2 to 5, in which **R2** is OR^{12}.

7. A compound according to any of Claims 2 to 6, in which **R3** is OR^{12}.

8. A compound according to any of Claims 2 to 6, in which **R3** is NHR^{13}.

9. A compound according to any of Claims 2 to 6, in which **R3** is halogen.

10. A compound according to any of Claims 2 to 6, in which **R3** is H.

11. A compound according to any of Claims 2 to 6, in which **R3** is optionally substituted C_1-C_6 alkyl,

12. A compound according to any preceding claim, in which **R10** and **R11** are H.

13. A compound according to any of Claims 1 to 11, in which **R10** is halogen.

14. A compound according to any of Claims 1 to 11, in which **R11** is halogen.

15. A compound according to any of Claims 1 to 12, in which **R7**, **R8**, **R10** and **R11** are H.

16. A compound according to any preceding claim, in which **R9** is selected from SO_2-C_1-C_6 alkyl such as SO_2-CH_3 or SO_2-CH_2CH_3.

17. A compound according to any of Claims 1 to 15, in which **R9** is SO_2-C_3-C_6 cycloalkyl.

18. A compound for use according to Claim 1, in which the compound is according to any of Claims 2 to 17.

19. A compound for use according to Claim 1 selected from the following list:

1-[4-[(6,7-dimethoxy-1-isoquinolyl)methyl]phenyl]pyrrolidin-2-one;

6,7-dimethoxy-N-(4-methylsulfonylphenyl)isoquinolin-1-amine;

6-methoxy-1-(4-methylsulfonylanilino)isoquinolin-7-ol;

7-methoxy-1-(4-methylsulfonylanilino)isoquinolin-6-ol;

1-(4-methylsulfonylanilino)isoquinoline-6,7-diol;

6-ethoxy-1-(4-methylsulfonylanilino)isoquinolin-7-ol;

7-ethoxy-1-(4-methylsulfonylanilino)isoquinolin-6-ol;

6,7-diethoxy-N-(4-methylsulfonylphenyl)isoquinolin-1-amine;

1-[4-[(6,7-dimethoxy-1-isoquinolyl)amino]phenyl]pyrrolidin-2-one;

N-(4-methylsulfonylphenyl)-6-vinyloxy-isoquinolin-1-amine;

6-isopropoxy-N-(4-methylsulfonylphenyl)isoquinolin-1-amine;

N-(4-methylsulfonylphenyl)-6-pyrimidin-2-yl-isoquinolin-1-amine;

N-(4-methylsulfonylphenyl)-6-pyrimidin-2-yl-isoquinolin-1-amine;

N-[1-(4-methylsulfonylanilino)-7-isoquinolyl]acetamide;

N7-ethyl-N1-(4-methylsulfonylphenyl)isoquinoline-1,7-diamine;

6-methoxy-N-(4-methylsulfonylphenyl)-7-vinyl-isoquinolin-1-amine;

7-ethyl-6-methoxy-N-(4-methylsulfonylphenyl)isoquinolin-1-amine;

7-bromo-1-(4-methylsulfonylanilino)isoquinolin-6-ol;

N7-benzyl-6-methoxy-N1-(4-methylsulfonylphenyl)isoquinoline-1,7-diamine;

N7-(cyclopropylmethyl)-6-methoxy-N1-(4-methylsulfonylphenyl)isoquinoline-1,7-diamine;

6-methoxy-N1-(4-methylsulfonylphenyl)-N7-propyl-isoquinoline-1,7-diamine;

N6-(cyclopropylmethyl)-7-methoxy-N1-(4-methylsulfonylphenyl)isoquinoline-1,6-diamine;

6-(azetidin-1-yl)-7-methoxy-N-(4-methylsulfonylphenyl)isoquinolin-1-amine;

6-ethyl-1-[(4-methanesulfonylphenyl)amino]isoquinolin-7-ol;

N-[4-(ethanesulfonyl)phenyl]-6,7-diethoxyisoquinolin-1-amine;

6,7-diethoxy-N-[4-(oxetan-3-yl)phenyl]isoquinolin-1-amine;

6,7-diethoxy-N-[4-(1,2-oxazol-3-yl)phenyl]isoquinolin-1-amine;

6,7-diethoxy-N-[4-(1,2-oxazol-5-yl)phenyl]isoquinolin-1-amine;

6,7-diethoxy-N-(3-fluoro-4-methanesulfonylphenyl)isoquinolin-1-amine;

6,7-diethoxy-N-(2-fluoro-4-methanesulfonylphenyl)isoquinolin-1-amine;

N-[4-(cyclopropanesulfonyl)phenyl]-6,7-diethoxyisoquinolin-1-amine;

6-ethoxy-7-(2-fluoroethoxy)-N-(4-methanesulfonylphenyl)isoquinolin-1-amine;

6,7-bis(2-fluoroethoxy)-N-(4-methanesulfonylphenyl)isoquinolin-1-amine;

1-[(4-methanesulfonylphenyl)methyl]-6-(propan-2-yloxy)isoquinoline;

6-[(4-fluorophenyl)methoxy]-N-(4-methanesulfonylphenyl)isoquinolin-1-amine; and

6-ethoxy-N-(4-methanesulfonylphenyl)-7-propylisoquinolin-1-amine; any pharmaceutically acceptable salts, hydrates, solvates, or polymorphs, tautomers, optically active forms, enantiomeric mixtures thereof, and mixtures thereof.

20. A pharmaceutical composition comprising a compound of Formula (I) as defined in Claim 1 and a pharmaceutically acceptable carrier, diluent or excipient thereof, with the proviso that the compound is not a compound selected from the following list:

3-Methyl-*N*-[4-(4-pyridinyl)phenyl]-1-isoquinolinamine, RN:1368370-93-7;

1-[[4-(4-Pyridinyl)phenyl]amino]-8-isoquinolinecarbonitrile, RN:1368269-53-7;

8-Methyl-N^1-[4-(4-pyridinyl)phenyl]-1,5-isoquinolinediamine, RN:1369288-67-4;

5-Nitro-*N*-[4-(4-pyridinyl)phenyl]-1-isoquinolinamine, RN:1368370-43-7;

N-[4-(4-Pyridinyl)phenyl]-5-(trifluoromethyl)-1-isoquinolinamine, RN: 1367803-95-9; and

4-Bromo-N^1-[4-(4-pyridinyl)phenyl]-1,7-isoquinolinediamine, 1369271-85-1.

21. A compound according to any of Claims 2 to 19 for use as a medicament.